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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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SCHIFF HARDIN, LLP
PATENT DEPARTMENT
6600 SEARS TOWER
CHICAGO, IL 60606-6473

EXAMINER	
ABDI, KAMBIZ	
ART UNIT	**PAPER NUMBER**
3621	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/773,949	REINFELDER ET AL.	
	Examiner	Art Unit	
	Kambiz Abdi	3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 November 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The prior office actions are incorporated herein by reference. In particular, the observations with respect to claim language, and response to previously presented arguments.

- Claims 1-10, 14, and 18 are amended.
- No claim has been canceled.
- No claim has been are added
- Claims 1-18 are considered.

Response to Arguments

Applicant's arguments filed 1/17/2006 have been fully considered but they are not persuasive. The Applicant argues that a unique feature of his invention is "... that the new and stored software components are combined without changing any code within the software components and without writing any adapters." The Applicant further states that the primary reference, Foody, teaches "directly away from the invention" REMARKS, 2nd paragraph. By citing the last sentence of the paragraph and ignoring the previous section that discloses the use of a dynamic link library.

A reference is to be considered not only for what it expressly states, but also for what it would reasonably have suggested to one of ordinary skill in the art. *In re DeLisle, 160 USPQ 806 (CCPA 1969). Also,* the Examiner has cited particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Foody teaches "... that the new and stored software components are combined without changing any code within the software components and without writing any adapters." As per Col. 7, lines 27-35, Col. 16, lines 10-33 and Col. 18, lines 39-54 in his discussion of dynamically loaded or the system can dynamically load and unload object systems adapters.

To further clarify the Foody reference, the Examiner presents the obvious meaning of "dynamic-link library" as per Microsoft Computer Dictionary, Fourth Edition, Copyright 1999, page 159, which states " n. A feature of the Microsoft Windows family of operating systems and OS/2 that allows executable routines to be stored separately as files with DLL extensions and to be loaded only when needed by a program. A dynamic-link library has several advantages. First it does not consume any memory until it is used. Second, because a dynamic-link library is a separate file, a programmer can make corrections or improvements to only that module without affecting the operation of the calling program or any other dynamic-link library. Finally, a a programmer can use the same dynamic-link library with other programs."

Further, the prior art, Foody, does disclose the use of dynamically linked libraries (DLL) and the use there of to address the linking of inputs and outputs. Col. 16, lines 9-20, Col. 19, lines 8-50.

However, newly amended claims as they have been presented currently and the argument put forward by the applicant does not negate the above statements, but discusses the new amendments as they disclose that the "dynamically linkable named inputs and outputs named by the user at runtime and also modified by the user at runtime..." Below is the newly introduced art to remedy the deficiency of the new amendments to the claims.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foody et al. U.S. Patent 5,732,270 [Foody] and further in view of Microsoft Computer Dictionary, Fourth Edition, Copyright 1999, page 159, [Microsoft] and Design Patterns, Elements of Reusable Object-Oriented Software Seventh Printing October 1996, pages 370-371. [Design] and further in view of O'Neil et al U.S. Patent No. 6,256,771 [O'Neil]

As to claims 1, 5, 9, 10, 14 and 18:

The recitations that an object oriented computing system on a computer platform, an object oriented computing system on a computing system, a method for designing software components in an object oriented computing system, a storage medium including object oriented code having an object oriented computing system on a computer platform, a storage medium and a method for designing software components in an object oriented computing system having a storage medium including object oriented code, has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a method, a system, an apparatus, etc. and the portion of the claim following the preamble is a self-contained description of the method or the system, etc., not depending for completeness upon the introductory clause. *Kropa v. Robie, 88 USPQ 478 (CCPA 1951)*

Foody et al discloses:

"objects comprising software components " (see col. 12, lines 32-36);

Foody discloses the claimed invention except for defining the operation of a dynamic-link library. However, Foody does as per Col. 7, lines 27-35, Col. 16, lines 10-33 and Col. 18, lines 39-54 disclose dynamically loaded or the system can dynamically load and unload object systems adapters.

To further clarify the Foody reference, the Examiner presents the obvious meaning of "dynamic-link library" as per Microsoft Computer Dictionary, Fourth Edition, Copyright 1999, page 159, which states " n. A feature of the Microsoft Windows family of operating systems and OS/2 that allows executable routines to be stored separately as files with DLL extensions and to be loaded only when needed by a program. A dynamic-link library has several advantages. First it does not consume any memory until it is used. Second, because a dynamic-link library is a separate file, a programmer can make corrections or improvements to only that module without affecting the operation of the calling program or any other dynamic-link library. Finally, a programmer can use the same dynamic-link library with other programs."

Microsoft teaches that it is known in the art to provide objects comprising software components, which are dynamically loadable at runtime, and which have dynamically linked named inputs and outputs stored on a memory of the computer system. It would have been obvious to one having ordinary skill in

the art at the time the invention was made to provide the dynamic-link library function of Foody with the description of Microsoft, in order to show the obviousness of the dynamically- link library of Foody and it's function.

What is not specifically clear by the Foody teaching is the role the user plays in naming or selecting the input and output at the runtime. However, O'Neil clearly teaches that the component object (netlets) can be manually named (selected) and configured by a user to dynamically compose the software (See O'Neil abstract, fig. 9 and related text, column 3, line 66-column 4, line 25 and column 6, lines 12-21 and lines 46-54). Therefore, It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the flexibility of the O'Neil's teachings with that of Foody to provide further control as well as enhanced flexibility of dynamic component configuration and diversity of such software component.

Foody further discloses:

which have "dynamically linkable named inputs and outputs stored on a memory of the computer system" (see col. I, lines 60-67; see col. 2, lines 1-S; see col. 10, lines 39-49), and Microsoft Computer Dictionary, Fourth Edition, Copyright 1999, page 159, which states " n. A feature of the Microsoft Windows family of operating systems and OS/2 that allows executable routines to be stored separately as files with DLL extensions and to be loaded only when needed by a program. A dynamic-link library has several advantages. First it does not consume any memory until it is used. Second, because a dynamic-link library is a separate file, a programmer can make corrections or improvements to only that module without affecting the operation of the calling program or any other dynamic-link library. Finally, a programmer can use the same dynamic-link library with other programs."

3. Foody discloses the claimed invention except for said components also have internal tasks for queuing of data transferred into and out from the components via said inputs and outputs;. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have said components also have internal tasks for queuing of data transferred into and out from the components via said inputs and outputs since it is known in the art that said components also have internal tasks for

queuing of data transferred into and out from the components via said inputs and outputs. For example Design Patterns, Elements of Reusable Object-Oriented Software Seventh Printing October 1996, pages 370-371. [Design}

Foody further discloses:

4. "an event communication framework providing automated, pattern-based, fully distributable events such that when a new dynamically loadable at runtime software component is loaded into said computer system also having dynamically linkable named inputs and outputs, the new software component inputs and outputs are all automatically linked to the inputs and outputs of the same name of said stored software components (Col. 16, lines 9-20, Col. 19, lines 8-50), so that the new and stored software components are combined without changing any code within the software components and without writing any adapters." (see Figure 2, an overview of the system architecture in accordance with preferred embodiment of the invention; see col. 8; lines 66-67; see col. 9, lines 1-27, Design, Pg. 370, *List*). One having the ordinary skill in the art at the time of the invention would have found it obvious that events specifies the operations to be performed on an object and object systems have application programs that communicate with their contained objects and abide by certain input and output rules.

As to claims 2, 6, 11 and 15:

Foody et al further discloses:

"wherein the inputs and outputs of the objects are provided via CsaConnectable and CsaRemote objects, respectively." (For example col. 10, lines 44-48). One having the ordinary skill in the art at the time of the invention would have found it obvious in that object systems abiding by input and output rules have application programs that name the file information at the beginning of a program.

As to claims 3, 7, 12 and 16:

Foody et al further discloses:

"wherein each data structure associated with the inputs and outputs is described in a separate header file which can be used by every object to be linked" (For example col. 10, lines 44-49).

Also, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to wherein each data structure associated with the inputs and outputs is described in a separate header file which can be used by every object to be linked since it is known in the art that wherein each data structure associated with the inputs and outputs is described in a separate header file which can be used by every object to be linked. For example The Waite Group's C Primer Plus- User-Friendly Guide to the C programming Language- Revised Edition, Fifth Printing 1988, page 333-334, Header Files: An Example.

As to claims 4, 8, 13 and 17:

Foody et al further discloses:

"wherein each object is a shared library which is dynamically linkable at runtime by an ASCII configuration filing names of the inputs and outputs of the objects" (For example col. 15, lines 41-60; see col. 19, lines 17-25; see col. 19, lines. 8-15).

Examiner's Note: Examiner has cited particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Conclusion

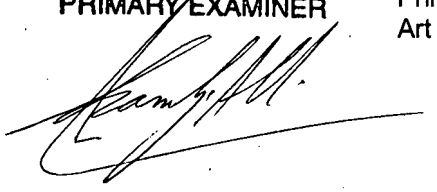
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,275,871 B1- Reinfelder et al. ASYCHRONOUS TRANSPORT OPTIMIZING OBSERVER-PATTERN-LIKE SYSTEM SUPPORTING SEVERAL MODES FOR AN INTERFACE DEFINITION LANGUAGE-LESS COMMUNICATION SUBSYSTEM.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kambiz Abdi whose telephone number is ((571)272-6702. The examiner can normally be reached on 10 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fischer Andrew can be reached on (571)272-6779. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KAMBIZ ABDI
PRIMARY EXAMINER



Kambiz Abdi
Primary Examiner
Art Unit 3621

January 19, 2007